Nebraska Education Technology
Planning Model
Fall 1996

Supporting Teaching & Learning

Managing Curriculum & Instruction

Processing Information

Supporting Communication

Administering & Managing Organizational Resources

Managing Learning Resources

Millard Central Middle School - Millard NE - Ink Drawing by Barb Mertz
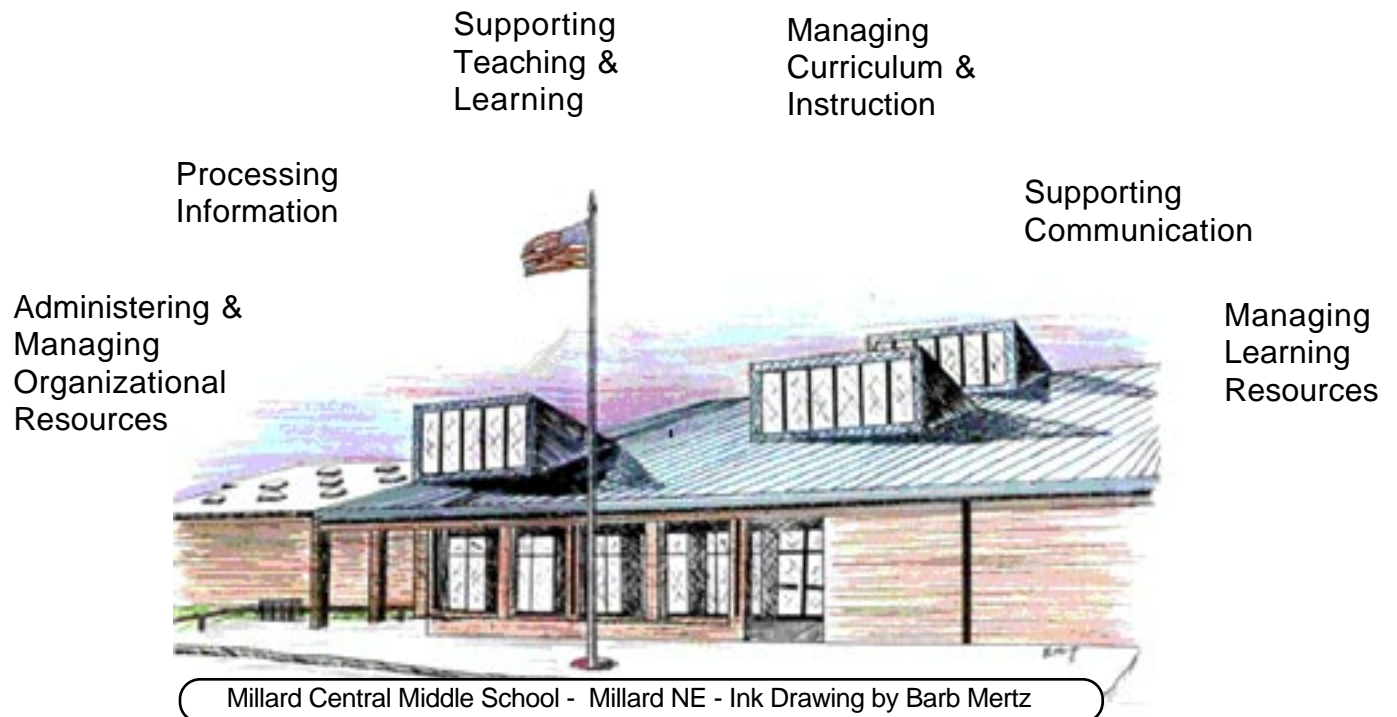
High Performance Learning for All Students

Human Resources	Equipment & Networks	
Software & Materials	Facilities & Space	Policies & Procedures

Components

The **Nebraska Education Technology Planning Model** has been developed in cooperation between the Nebraska Educational Service Units and the Nebraska Department of Education Education Technology Center.

For planning assistance please contact your area Educational Service Unit or the Education Technology Center, Nebraska Department of Education, 301 Centennial Mall South, Lincoln, NE 68509-4987.
Phone 402-471-2057

NEBRASKA EDUCATION TECHNOLOGY PLANNING MODEL

Table of Contents

Section I.

Introduction To Planning

**Planning for the Use of Education Technology
in Support of School Improvement**

A Guide for District School Improvement Planning Teams

The purpose of this publication is to help school district leaders improve the use of technology in the schools through the design and implementation of a comprehensive structure and process for planning a technology support system that is linked to the district's overall school improvement efforts. This guidebook deals not just with the development of a plan but with the application of an ongoing planning process. The guide will help school leaders establish a technology planning process that will ultimately change the way they use technology to support school and program improvement.

Because the technology support system is not a program but a set of coordinated human and material resources and processes, a plan for this development cannot be accomplished without reference to that which it is intended to support. Planning for the development of the technology support system should be an integral component of district-wide school improvement planning. Technology planning that is unconnected and unresponsive to the school improvement process runs the risk of creating a technology system and technology applications that operate at the periphery of the organization. Similarly, if school improvement planning is conducted without attention to the integration of a technology support system and applications, such planning is likely to result in curriculum and instruction which does not adequately prepare students for real world learning and work. Technology tools are essential to accomplishing the outcomes of a revitalized curriculum and to achieving an increased productivity and effectiveness for all members of the school learning community--students, teachers, and administrators.

The school improvement planning process serves as the major point of reference for guiding the overall direction of improvements. As such, it requires that any other planning, whether it be planning for staff development, curriculum improvement, or technology planning, use the school improvement planning process and plan as a reference point. The centrality of school improvement planning does not diminish the importance of undertaking other planning and plans, such as those for staff development, curriculum improvement, and technology applications. What is important is that each of these plans contributes to the overarching school improvement directions.

Any one of these individual plans, and particularly the technology plan, that does not have linkages to the overall school improvement plan runs the risk of making recommendations about their particular focus (e.g. technology applications) that do not advance the goals and objectives laid out in the school improvement plan. For example, a technology plan recommending the design and implementation of a telecommunications infrastructure would usually be considered a reasonable one. But moving on that recommendation without developing explicit connections to the overarching improvement directions in the school or district, particularly as they relate to enhanced student learning and to organizational effectiveness and efficiency, enlarges the possibility that the infrastructure will not be used to advance those target areas for improvement.

This guidebook provides advice for districts that:

a. have not yet completed either a school improvement plan or a technology plan and wish to conduct an integrated planning process;

<div align="center">**o r**</div>

b. wish to develop a technology plan but do not have a school improvement plan and do not contemplate developing one at the same time.

Section II, **Integrating School Improvement and Education Technology Planning**, presents the essential tasks and steps for the School Improvement Process (SIP) and shows how planning for technology can be incorporated into those tasks and steps. This process will assist those districts wishing to conduct an integrated planning process.

Section III, **The Nebraska Education Technology Planning Model,** presents the tasks and steps for conducting technology planning as a stand-alone process. The Appendices contain forms and instruments that can be used in technology planning.

A basic framework for the school improvement process, as used by many schools in the state, is as follows:

<div align="center">**Major Components of School Improvement Process (SIP)**</div>

I.   Preplanning/Getting Started
- A. Understanding and Development of the School Improvement Planning process (administration, staff, students, community)
  - 1. History of the SIP research/effective schools research
  - 2. Why schools need to change.
  - 3. Overview of organizational change theory and practice
  - 4. Understand the goals of the process
- B. Commitment to the Process
  - 1. Identification of stake holders.
  - 2. Agreement between all parties of their shared responsibilities of the process
    (Board of Education, community, students, staff, faculty, administration, etc.)
- C. Formation of the School Improvement Team and other committees
  - 1. Critical groups and what are the unique perspectives they bring to the process.
  - 2. What are the roles and responsibilities of School Improvement Team members
  - 3. Team building
- D. Timeline
  - 1. Clarify the major steps in the process
  - 2 Establish Timeline

II. **Developing the Values/Beliefs and Vision/Mission**
  A. Best practice Research Overview
     1. Review of the Effective Schools Research
     2. Review of Literature on Current Trends
     3. Review of Literature on the Change Process
  B. Values/Beliefs About:
     1. Students and Learning
     2. Teachers and Teaching
     3. Effective Organizations
  C. Vision/Mission Design/Revision
     1. What should school look like?
     2. What we do
     3. For whom?
  D. Essential Learnings of the District
     1. Explore what all students must know and be able to do upon completion of the formal school experience, K-12
     2. Develop essential learnings

III. **Information/Data Collection**
  A. Information Needed
     1. Determine questions to be answered
     2. Identify current data available
     3. Assigned responsibilities
     4. Reporting strategies
  B. Collection of Information
     1. Methods and process to be used
     2. Disaggregation strategies
     3. Assigned responsibilities
     4. Reporting strategies
  C. Analysis
     1. Validity of data
     2. Develop findings/answers to questions
     3. Reporting process/format
     4. Review best practice research/norms and standards
     5. Identify additional data needs
  D. Drawing Conclusions
     1. Identify commonalties/trends
     2. Identify problems versus symptoms
     3. Identify strengths and potential areas for improved student learning

IV. **Target Areas/Goals**
  A. Study potential areas for improved student learning based on data collected
  B. Select Target Areas supported by evidence
  C. Prioritize areas
  D. Write Target Area Goals
     1. Identify expected change in student performance
     2. Identify evidence of student success

V. Action Plan Development
A. Establish Student Learning/Target Areas/Goals/Committees
1. Committee should be representative of stake holders and expertise
2. Involve community/parents/students
3. Inservice committees on planning process
B. Collect Additional Information
1. Research best practice in target area goals
2. Reexamine original data and/or collect additional data specific to the target areas
3. Analyze and report information
C. Include Essential Elements of Action Planning for the target area goal
1. Write student learning/goals/target area and identify assessment strategies
2. Continue review of best practices
3. Select strategy(s) based on team consensus
4. Specify tasks for each strategy
5. Assign responsibility for each task
6. Identify and align resources needed
7. Develop Timelines
8. Assess changes in student learning
D. Communicate Plan
1. Staff
2. Community
E. Submit for Board Approval

VI. Implementation
A. Operationalize the Action Plan
B. Formative Evaluation
1. Review progress and adjust
2. Communicate to stake holders (status report)
C. Summative Evaluation
1. Analyze results
2. Report to stake holders

VII. Continuing the Process

A. Annual School Improvement Team Review
1. Revisit vision/mission, values/beliefs and essential learnings
2. Review impact on student learnings
3. Adjust as necessary
B. Document progress
C. Celebrate success
D. New team member rotation
E. Initiate new goals

A basic framework for education technology planning is as follows:

Major Components of Education Technology Planning

1.0 Form a Planning Team and Organize the Planning Process
   1.1 Adopt a planning process
   1.2 Communicate with key stake holders
   1.3 Identify planning resources
   1.4 Establish the overall purpose and direction for technology

2.0 Information/Data Collection
   2.1 Determine information needs
   2.2 Collect information
   2.3 Data analysis
   2.4 Draw conclusions

3.0 Select/Write Target Areas/Goals
   3.1 Study potential areas for improved student learning based on data collected
   3.2 Study potential areas for changes in organizational structure
   3.3 Select Target Areas supported by evidence of student learning needs
   3.4 Prioritize areas
   3.5 Write Target Area Goals

**4.0 Develop Organization (Action Plan) and Implementation Plan**
   4.1 Establish and Empower Target Areas/Goals/Committees
   4.2 Collect Additional Information
   4.3 Design Action Plan
   4.4 Communicate Plan
   4.5 Submit for Board Approval

5.0 Design Documentation and Evaluation System
   5.1 Develop Documentation System
   5.2 Prepare Implementation Monitoring System
   5.3 Design Assessment of Objectives

It is preferred that education technology planning be an integral part of the school improvement planning process. However, the extent to which this happens may vary from district to district. If a district has a school improvement plan, based on student learning performance, the technology plan could be infused into the action plans of the school improvement plan [See Major Components of School Improvement Process (SIP) "V". Action Plan Development].
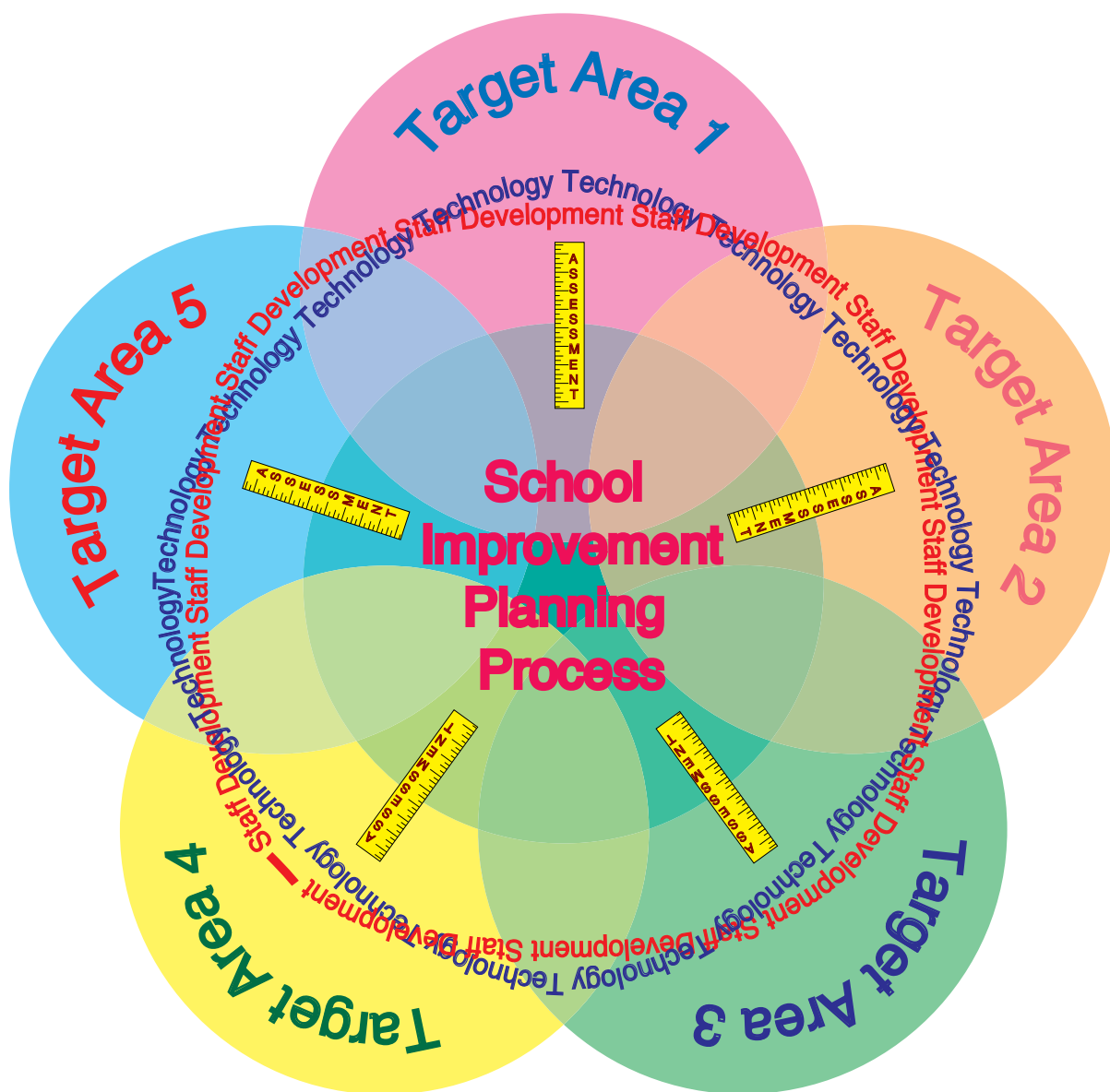
This integrated process is portrayed in Figure 1, page 8. If desired, a district could also embark upon a specific technology planning effort. If this is the case, the technology plan should compliment the school improvement plan. In districts that are not involved in formal school improvement planning the technology planning model can be used to formalize the technology planning process.

Section II.

Integrating School Improvement
and
Education Technology Planning

Integrating   School   Improvement
and
Education   Technology   Planning

Section II. presents the tasks and steps for integrating education technology planning into the school improvement process. [**Bold italics** indicate integration of technology planning.]

Major Components of the School Improvement Process (SIP)
with the
Integration of Education Technology Planning

I .   Preplanning/Getting   Started
    A. Understanding and Development of the School Improvement **and Technology**
          Planning process (administration, staff, students, community)
       1 . History of the SIP research/effective schools research
       2 . Why schools need to change
       3 . Overview of organizational change theory and practice
       4 . Understand the goals of the process
    B. Commitment to the Process
       1 . Identification of stake holders
       2 . Agreement between all parties of their shared responsibilities of
          the process (Board of Education, community, students, staff, faculty,
          administration, etc.)
    C. Formation of the School Improvement Team and other committees
       1 . Critical groups and what are the unique perspectives they bring to
          the process **including educators and community members involved**
          with technology.
       2 . What are the roles and responsibilities of School Improvement team members
       3 . Team building
    D. Timeline
       1 . Clarify the major steps in the process
       2   Establish timeline

I I .   Developing the Values/Beliefs and Vision/Mission
    A. Best practice Research Overview
       1 . Review of the Effective Schools Research
       2 . Review of literature on Current Trends **including Current Trends in**
          Education Technology and how it supports teaching and learning
       3 . Review of Literature on the Change Process
    B. Values/Beliefs About:
       1 . Students and Learning
       2 . Teachers and Teaching
       3 . Effective Organizations
    C. Vision/Mission Design/Revision
       1 . What should school look like?
       2 . What we do
       3 . For whom?

D. Essential Learnings of the District
   1. Explore what all students must know and be able to do upon completion of the formal K-12 school experience
   2. Develop essential learnings

III. Information/Data Collection
   A. Information Needed
      1. Determine questions to be answered
      2. Identify current data available
      3. Assigned responsibilities
      4. Reporting strategies
   B. Collection of Information
      1. Methods and process to be used
      2. Disaggregation strategies
      3. Assigned responsibilities
      4. Reporting strategies
      5. Inventory of technology hardware and software
      6. Inventory of teacher and student technology skills
   C. Analysis
      1. Validity of data
      2. Develop findings/answers to questions
      3. Reporting process/format
      4. Review best practice research/norms and standards
      5. Identify additional data needs
   D. Drawing Conclusions
      1. Identify commonalties/trends
      2. Identify problems versus symptoms
      3. Identify strengths and potential areas for improved student learning
      4. Identify strengths and potential areas for the use of technology to improve organizational support

IV. Target Areas/Goals
   A. Study potential areas for improved student learning and **organizational support** based on data collected
   B. Select Target Areas supported by evidence
   C. Prioritize areas
   D. Write Target Area Goals
      1. Identify expected change in student performance
      2. Identify evidence of student success

V. Action Plan Development
   A. Establish Student Learning/Target Areas/Goals/Committees
      1. Committee should be representative of stake holders and expertise
      2. Involve community/parents/students
      3. Inservice committees on planning process

B. Collect Additional Information
   1. Research best practice in target area goals
   2. Reexamine original data and/or collect additional data specific
      to the target areas
   3. Analyze and report information

C. Include Essential Elements of Action Planning for the target area goal
   1. Write student learning/goals/target area and identify assessment strategies
   2. Continue review of best practices
   3. Select strategy(s) **which may include technology** based on team consensus
   4. Specify tasks for each strategy
   5. Assign responsibility for each task
   6. Identify and align resources **including hardware/software** needed
   7. Develop Timelines
   8. Assess changes in student learning
   9. Assess changes in organizational support
D. Communicate Plan
   1. Staff
   2. Community
E. Submit for Board Approval

VI. Implementation
   A. Operationalize the Action Plan
   B. Formative Evaluation
      1. Review progress and adjust
      2. Communicate to stake holders (status report)
   C. Summative Evaluation
      1. Analyze results
      2. Report to stake holders

VII. Continuing the Process

   A. Annual School Improvement **and Education Technology** Team Review
      1. Revisit vision/mission, values/beliefs and essential learnings
      2. Review impact on student learnings
      3. Adjust as necessary
   B. Document progress
   C. Celebrate success
   D. New team member rotation
   E. Initiate new goals

Integrating   School   Improvement
and
Education   Technology   Planning
Graphic   Model

Learning Community

Governing Values

Mission

**Internal Analysis
External Analysis**
(on-going at all levels)

**B.P. Research
Data Collection**

**Functions
&
Components**
including those related
to technology

Improvement/Target Areas

Goals & Objectives

Strategies

Action Plan

Implementation

Evaluation
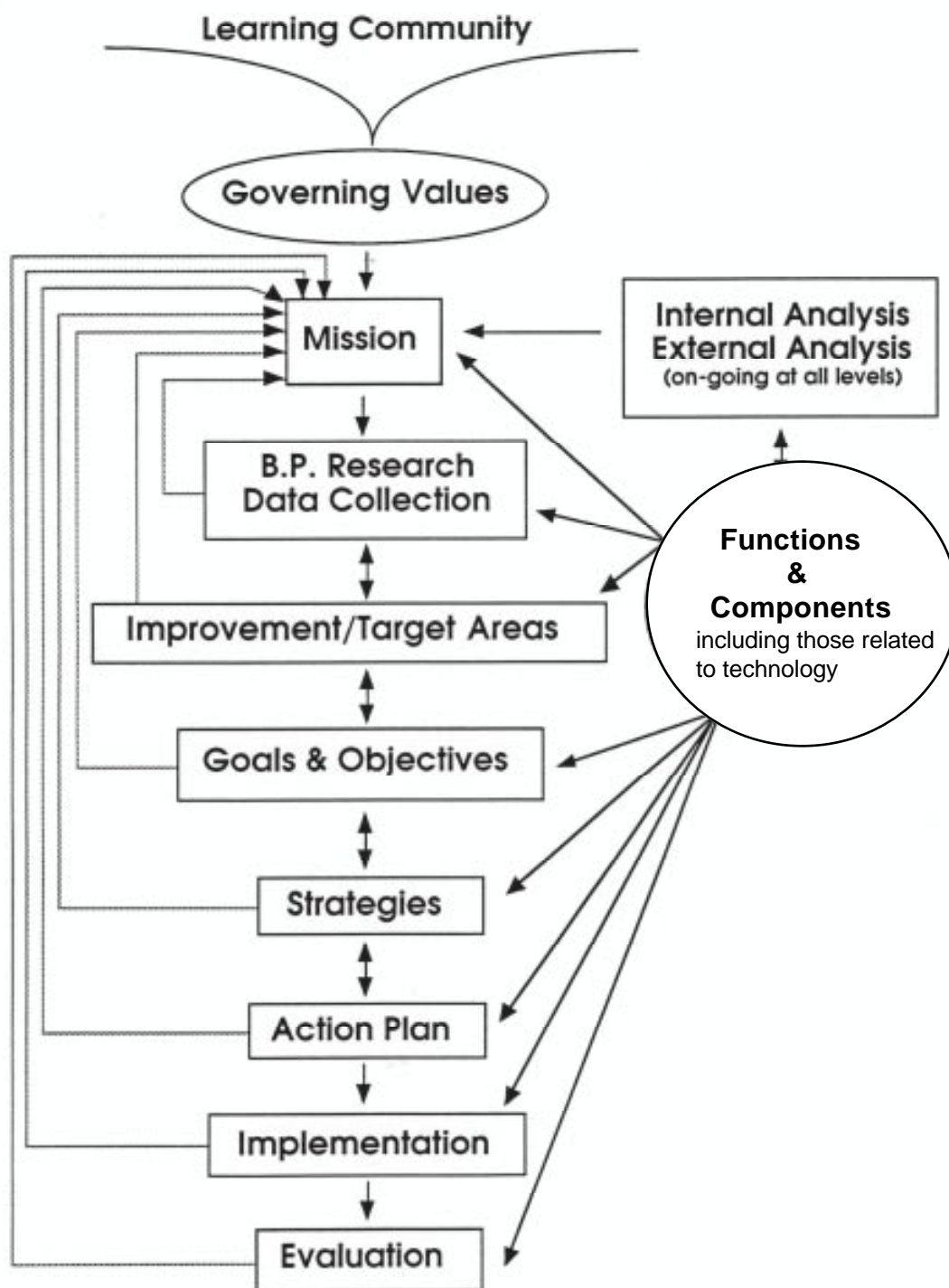
Section III.

The Nebraska Education Technology
Planning Model

Nebraska Education Technology Planning Model
An Overview

1.0 Form a Planning Team and Organize the Planning Process
    1.1 Adopt a planning process
    1.2 Communicate with key stake holders
    1.3 Identify planning resources
    1.4 Establish the overall purpose and direction for technology

2.0 Information/Data Collection
    2.1 Determine information needs
    2.2 Collect Information
    2.3 Data analysis
    2.4 Draw conclusions

3.0 Select/Write Target Areas/Goals
    3.1 Study potential areas for improved student learning based on data collected
    3.2 Study potential areas for changes in organizational structure
    3.3 Select Target Areas supported by evidence of student learning needs
    3.4 Prioritize areas
    3.5 Write Target Area Goals

4.0 Develop Organization (Action Plan) and Implementation Plan
    4.1 Establish and empower Target Areas/Goals/Committees
    4.2 Collect additional information
    4.3 Design action plan
    4.4 Communicate plan
    4.5 Submit for board approval

5.0 Design Documentation and Evaluation System
    5.1 Develop documentation system
    5.2 Prepare implementation monitoring system
    5.3 Design assessment of objectives

Nebraska Education Technology Planning Model

Section III presents the tasks and steps for conducting education technology planning as a stand-alone process. This education technology planning process closely resembles the school improvement frameworks.

1.0 Form a Planning Team and Organize the Planning Process

Technology planning should result in the improvement of student learning. In some cases student learning will be directly influenced. However, in some cases, there will be an indirect influence due to the improvement of the efficiency of school operation.

- Planning is guided by the district mission and the belief that new and emerging technologies will help the district prepare all students for success.

- Planning and implementation are based on timely, comprehensive and high quality information about all levels of district and school performance.

1.1 Adopt a Planning Process
The school/district should adopt a formal technology planning process.

1.2 Communicate with Key Stakeholders

- Involvement of key school/community stake holders is imperative. The planning team should include teachers, administrators, students, parents, business and other key stake holders in the community.

- Communicate with stake holders about the process and encourage their participation throughout.

1.3 Identify Planning Resources

- The planning team identifies the resources needed. These may include time, best practice information, consultants, materials, and financial resources.

1.4 Establish the Overall Purpose and Direction for Technology

- The technology plan should include beliefs, mission, objectives and action plans. A technology plan may be written which may include beliefs, mission, objectives strategies, and action plans.

- The first step is to educate the team and the community about how technology can be used to accomplish student learning goals.

- For the technology planning process to be successful the team and the community must be knowledgeable about how technology can improve student learning.

2.0 Information/Data   Collection

This task entails examining all aspects of the telecommunications infrastructure and technology applications with a particular focus on how these applications support student learning. Data is collected in five component areas: human resources, equipment and networks, software and materials, facilities and space, and policies and procedures (see Appendix B pg. 23 for further explanation).

These priorities must be clearly linked to the target areas identified in the school improvement plan.

> 2.1 Determine information needs (Sample forms for gathering data are provided in Section III pg 23)
>
> > • Determine questions to be answered in such areas as, but not limited to:
> >
> > > Student population information
> > > School facility information
> > > Inventory of programs and services
> > > Student technology literacy skills
> > > Teacher technology literacy skills
> > > Human resource development
> > > Inventory and utilization of hardware and software
> > > Technology support of teaching and learning
>
> 2.2 Collect Information/Data (See Appendix C pg. 24)
>
> > • Sufficient information and data need to be gathered to provide an adequate base for decision-making. Specific collection instruments may vary based on varying needs. (Some samples of various instruments can be found in Section III pg. 23)
>
> 2.3 Data Analysis
>
> > • This step involves determining the validity of the data gathered and the analysis of the data to develop findings.   A status report is then developed based on this analysis.
>
> 2.4 Draw conclusions
>
> > • In this step commonalities, trends, and problems should be identified. Care needs to be taken that we identify the actual problem and not dwell on symptoms. At this point, strengths and potential areas for improved student learning should be identified. There may be instances in which technology interventions will not directly tie to student learning outcomes, however, they must be linked to identified target areas.

3.0 Select/Write Target Areas/Goals

This task entails describing the specific initiatives to be implemented. Technology plans should show how these initiatives will contribute to addressing the target areas for improvement.

3.1 Study potential areas for improved student learning based on information/data collected

- From the information/data produced in task two, the planning team members identify discrepancies between what is and what should be.

3.2 Study potential areas for changes in organizational structure

- Student learning is indirectly influenced by the efficiency of the school operation

3.3 Select Target Areas supported by evidence of student learning needs

- Target areas should be selected based on the discrepancies found in 3.1

3.4 Prioritize areas

- The planning team should prioritize the target areas. A school/district will likely have more success if these target areas are limited to five or less.

3.5 Write Target Area Goals/Objectives

- As the objectives are described for each priority, identify the functions which are to be addressed by the respective Goal/Objective (A detailed description of the functions can be found in Appendix E1 pg. 26)

- The goals/objectives should identify expected change in student performance or organizational efficiency

- Evidence of student success or organizational improvement should be identified

4.0 Develop Action Plan

This task entails developing actions plans and details regarding timelines, staff development, costs, policies and procedures, and organizational considerations.

4.1 Establish and Empower Target Areas/Goals Committees

- Committees should be representative of expertise, people affected, and involve community, parents, district staff, and students.

4.2 Collect Additional Information (Best practice, original data)

- In this phase reexamination of the original information/data and possibly collection of additional data specific to target areas may be necessary. Best

18

practice should be reviewed for each of the target areas.

4.3 Design Action Plan (Include Essential Elements of Action Planning for the Target Area Goal).
- Following are essential elements of Action Planning:

- Write target area goals and identify assessment strategies
- Continue review of best practices
- Select strategy(ies) based on committee consensus
- Specify tasks for each strategy
- Assign responsibilities for each task
- Identify and realign/reallocate the resources needed
- Design the Education, Training and Support System
- Obtain and report cost estimates
- Develop policies and procedures
- Develop timelines
- Assess changes in student learning

- (See Appendix E1 pg. 26 and E2 pg. 29 for examples of Action Plans)

4.4 Communicate Plan

- The plan should be communicated to all stake holders.

4.5 Submit for Board Approval

- Board approval will validate plan.

5.0 Design Documentation and Evaluation System

This task requires the development of a system for documentation, implementation monitoring, and outcome/impact evaluation. The evaluation should be an ongoing process.

5.1 Procedure

The evaluation plan should include formative evaluation which reviews progress to allow for adjustment and summative evaluation which analyzes the final results.

- Design the methods to determine if the desired target area goals were achieved. This should be based on indicators of student success.

- The evaluation should be based on timelines specified in the overall plan.

- The findings, along with recommendations, should be communicated to all stake holders.

5.2 Responsibilities

- The local district planning team should have overall responsibility for the evaluation.

- A subcommittee and/or evaluation specialists may be utilized in carrying out the specific evaluation tasks.

- The district planning team is responsible for reporting the findings.

IV.

Sample Data Gathering Forms

Appendix A

Envisioning Our Future Uses of Technology

Application Area/Function: _____

What we want to accomplish:	The technology applications we need:
[Refer to specific target areas for improvement, where possible]	

Appendix B

COMPONENTS

1. Human Resources, including full-time and part-time staff who are assigned responsibilities for developing and maintaining hardware, software or other components of the system, as well as faculty and staff who use the system.

2. Equipment and Networks, including computers, printers, modems, telephone and cable systems, local and wide area networks, distance learning networks, and hardware such as CD-ROM devices, videotape machines, interactive videodiscs, and satellite dishes.

3. Software and Materials, including computer software, as well as CD-ROMs, videodiscs, videotape, digital video tape and other storage media, including technology-mediated instructional materials, manuals and related supplies and support materials, for data, voice and graphics.

4. Facilities and Space, including offices, workrooms, learning centers, and classrooms equipped with air, lighting, and wiring systems.

5. Policies and Procedures, including directives, regulations, incentives, guidelines for the appropriate use of technology applications, and policies related to copyright of intellectual materials.

Overview of Information Collection Procedures

The following table provides a general overview of the recommended methods and instruments in this planning manual. It obviously is not exhaustive. Use this as a guide only. If you identify other methods, please use them.

Procedure	What it Measures or Records	Example Application
Behavior/Observational Checklists	Particular behaviors or conditions, both physical and verbal, and which are subjective. Generally quantitative.	Time Use Analysis, Instructional Models, Sociogram, Inventory of Resources, etc.
Interviews, Group and Individual	Persons response where qualification, perceptions, body language, emotion are impacting factors. Generally qualitative.	Attitudes, beliefs, affective issues.
Logs	Individual's behaviors self-reported over a span of time and where narrative is the most accurate form of reporting. (Qualitative and quantitative)	Instructional models used, types of tests used, at-risk behaviors, etc.
Records Analysis	Analysis of hard "data" like records, reports, curriculum documents. Generally quantitative.	Attendance records, NRT scores, census figures, etc.
Surveys of Opinion	Open responses that express feelings and attitudes.	School climate, trust levels, etc.
Surveys as Questionnaire	Demographic characteristics, self-reported variables	Technology usage and availability at home, behavior characteristics observed
Others:		

Appendix D

FUNCTIONS

Functions that have a direct influence on student learning

1. Supporting Teaching, Learning and Research: including the use of computers and other technologies such as videodiscs, CD-ROM, and telecommunications as tools for enhancing teaching and learning processes for all members of the learning community.

2. Managing Curriculum and Instruction: including such instructional support activities as organizing student learning outcomes, aligning instructional resources and assessments to outcomes, monitoring performance, and preparing performance reports.

3. Processing Information: including such tasks as word and document processing, share document storage and retrieval, and electronic publishing. Document processing is concerned with creating, storing, updating, and disseminating a wide range of written communications in an interactive format using such tools as word processors, forms management, spreadsheets, and databases.

Functions that have an indirect influence on student learning

1. Supporting Communication: including research information exchange via voice, video and data using electronic and voice mail, electronic bulletin boards, and online video and computer conferencing access.

2. Administering and Managing Organizational Resources: including such functions as management of information related to students, personnel, finances, and organizational resources used to support teaching and learning.

3. Managing Learning Resources: including computerized cataloging and circulation, acquisitions, and information retrieval to support teaching, learning and research as well as electronic learning centers and student labs.

Appendix E1
Sample Action Plan Sequence

TARGET AREA: TECHNOLOGY

TARGET AREA GOAL: ALL STUDENTS WILL DEMONSTRATE TECHNOLOGY COMPETENCIES AS THEY APPLY TO THE WORLD OF WORK.

STATEMENT OF THE PROBLEM:
Data indicates that:
1. Students do not exhibit the skills necessary to successfully compete for jobs in the world of work.
(teacher perceptions, review of a random sampling of student work, existing technology assessment data)[1]

2. There is a significant imbalance in the types of technology used in the classroom.
(teacher documentation of technology assignments given, student journal of technology use over time)

3. There is an inconsistency in how technology use is assessed.
(teacher feedback)

4. There is a wide range in the self-perceived skills of how to teach technology on the part of teachers.
(teacher self-rating on skills in teaching technology.)

Therefore, the subcommittee on technology identifies the problem to be a) students are not using technology to high standards because there is inconsistency in instruction in technology and b) teachers have different levels of expertise in teaching technology.

STRATEGIES TO ACCOMPLISH THE GOAL:
ACTION PLAN

1. Identify the specific student technology competencies required for graduation.
2. Develop a curriculum plan for incorporating these competencies into all subject areas and disciplines, as appropriate.

TARGET AREA GOAL: ALL STUDENTS WILL DEMONSTRATE TECHNOLOGY COMPETENCIES AS THEY APPLY TO THE WORLD OF WORK.

STRATEGY #1: Identify the specific student technology competencies required for graduation.

Indicators of Student Success	Tasks	Responsible Party	Resources	Time Line
1. All students will demonstrate mastery in benchmark technology skills at their developmental level.	1. Research standards and technology curr. models. 2. Develop a technology model k-12 (This process should follow the district's model for curr. development) 3. Assess current technology skill levels of students in the identified technology bench-marks of the Model. 4. Identify areas of weakness in skills to focus on by level.		Standards documents	

ACTION PLAN

TARGET AREA GOAL: ALL STUDENTS WILL DEMONSTRATE TECHNOLOGY COMPETENCIES AS THEY APPLY TO THE WORLD OF WORK.

STRATEGY #2: Develop a curriculum plan for incorporating these competencies into all subject areas and disciplines, as appropriate.

Indicators of Student Success	Tasks	Responsible Party	Resources	Time Line
1. All students will demonstrate mastery in benchmark technology skills at their developmental level.	1. Assess teacher skill level related to the technology model, by level and discipline. 2. Study "Best Practices" 3. Identify grade/level competencies 4. Select strategies that can be used as the basis for a K-12 articulated, inter-disciplinary instruction. 5. Develop the accompanying assessment system that aligns goals, instruction and assessment 6. Develop and implement a professional development plan for staff by identified levels and disciplines			

Appendix E2
Sample Technology Mission, Beliefs, and Target Area Goals

Sample Technology Mission, Beliefs, and Target Area Goals which could be used by districts that do not have an overall school improvement plan.

Mission:

The mission of this district is to educate all students an empower them to become responsible citizens through a flexible and varied educational program committed to excellence.

Beliefs:

We believe, for students to succeed in the 21st century, they must have the ability to access, process, and communicate knowledge effectively.

We believe that all learning is interconnected.

We believe that effective teaching and learning require the utilization of current and appropriate education technology.

Target Area Goals:

Supporting Teaching and Learning--Enhance learning opportunities by providing technology-rich learning environments that support high performance teaching and learning.

Managing Curriculum and Instruction--Design and deliver a variety of authentic learning opportunities.

Processing Information--Organize and manage the development of information products in a variety of formats.

Supporting Communication--Facilitate information exchange within the organization and between the organization and external organizations.

Administering and Managing Organizational Resources--Facilitate optimum allocation and management of resources, including time, people, facilities and space.

Managing Learning Resources--Organize and facilitate access to a comprehensive collection of resources to support teaching and learning and administration and management.

Appendix F
Checklist for Education Technology Planning

1.0 Form a Planning Team and Organize the Planning Process
- ☐ 1.1 Adopt a planning process
- ☐ 1.2 Communicate with key stake holders
- ☐ 1.3 Identify planning resources
- ☐ 1.4 Establish the overall purpose and direction for technology

2.0 Information/Data Collection
- ☐ 2.1 Determine information needs
- ☐ 2.2 Collect Information
- ☐ 2.3 Data Analysis
- ☐ 2.4 Draw conclusions

3.0 Select/Write Target Areas/Goals
- ☐ 3.1 Study potential areas for improved student learning based on data collected
- ☐ 3.2 Study potential areas for changes in organizational structure
- ☐ 3.3 Select Target Areas supported by evidence of student learning needs
- ☐ 3.4 Prioritize areas
- ☐ 3.5 Write Target Area Goals

4.0 Develop Organization (Action Plan) and Implementation Plan
- ☐ 4.1 Establish and Empower Target Areas/Goals/Committees
- ☐ 4.2 Collect Additional Information
- ☐ 4.3 Design Action Plan
- ☐ 4.4 Communicate Plan
- ☐ 4.5 Submit for Board Approval

5.0 Design Documentation and Evaluation System
- ☐ 5.1 Develop Documentation System
- ☐ 5.2 Prepare Implementation Monitoring System
- ☐ 5.3 Design Assessment of Objectives

Section V.

Massachusetts Ed Online Technology Planning Kit/Workbook

Reprinted by permission